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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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<div>Air Liquide Intellectual Property Department Suite 1800 2700 Post Oak Boulevard Houston, TX 77056</div>				
7590	05/22/2007	<div>EXAMINER RIVELL, JOHN A</div>		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/516,962

Applicant(s)

CANNET ET AL.

Examiner

John Rivell

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/3/04 (application).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12032004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

By preliminary amendment filed concurrently with the application claims 1-10 have been canceled in favor of newly added claims 11-24. Thus claims 11-24 are pending.

The drawings are objected to because in figure 1, the illustrated reference lines of numbers "33" and "34" appear to indicate an inapposite condition. That is, the valve seat 34 appears as being located below the valve head 33. Given that the valve head reciprocates and is moved downwardly to open the valve, it would appear that the lead line of number 34 need to be relocated to indicate a seat above the valve head 33.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 recites the limitation "said valve means" in lines 25-26 (paragraph (6)(a)(1)). There is insufficient antecedent basis for this limitation in the claim. Additionally, the later recitation of "at least one valve means" of line 31 (paragraph (6)(b)) appears to add an additional valve element to the claim. Clearly these recitations regarding the "valve means" are listed in the reverse order, such that the later recitation of "at least one valve means" was to have been the antecedence for the following recitation(s) of "valve means". As there is only one "valve means" disclosed, the below rejections of claim 23 interprets only one "valve means" in the claim.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins in view of lung.

The patent to Watkins discloses, in figures 1-3 for example, an "apparatus which may be used for controlling the dispensing of a pressurized fluid, wherein: a) said apparatus comprises: 1) a body (at valve body 6) located about a first (longitudinal) axis comprising an internal passage (8) for said fluid, wherein said passage (8) extends between an inlet orifice (within the lower body extension below threads 18) and an outlet orifice (54); 2) a fastening base (the lower body extension) located about said first axis, wherein: (a) said base is threaded (at threads 18) at its external periphery; and (b) said base is substantially in coaxial connection with said inlet orifice; 3) an outlet connector (the external threaded outlet connector at 54 of figure 1) located about a second axis, wherein said outlet connector (at 54 of fig. 1) is substantially in connection with said outlet orifice;... 5) a tightening grip (at 14) comprising a tightening grip base (14)... and 6) a lever (50) located about a fourth axis, wherein (a) said lever (50) pivots around a fifth axis (at that axis of pin 48 supporting lever 50) which is substantially perpendicular to said first (longitudinal) axis; and (b) said lever (50) cooperates with at least one valve means (at 24), located on said internal passage, so as to regulate fluid movement between said inlet orifice and said outlet orifice" as recited in claim 11.

Thus the patent to Watkins discloses all the claimed features with the exception of having "a manometer means located about a third axis, (comprising) a pressure take-off substantially connected to said internal passage (positioned such that) said tightening grip is substantially located between said manometer and said fastening base" and the specifically recited dimension requirements of "the distance between said tightening grip base and said third axis of said manometer is between about 27 mm and about 35 mm; the distance between said tightening grip base and said second axis of

said outlet connector is between about 60 mm and about 75 mm; and the distance between said base of said tightening grip base and said fifth axis of said lever is between about 50 mm and about 110 mm."

Firstly, the patent to lung discloses that it is known in the art to employ a pressure indicating gauge at 5, "located about a third axis" and fluidly communicated by a channel 56 to the valve body fluid passage in chamber 57, upstream of the control valve at 37 and thus indicating the pressure of the tank to which the valve is connected at all times, the gauge 5 being physically located above a wrench base at numeral 1 such that the "tightening grip (at 1) is substantially located between said manometer (5) and (a) fastening base" at externally threaded extension 7 which is in turn threadedly connected to the liquefied gas tank, for the purpose of providing an indication of the fluid pressure of the contents of the tank at all times and for the gauge to be located above the "grip" area of the valve so as to not interfere with installation of the valve body to the tank.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Watkins a pressure indicating gauge, "located about a third axis" and fluidly communicated by a channel to the valve body fluid passage 8, upstream of the control valve 24 and thus indicating the pressure of the tank to which the valve is connected at all times, the gauge being physically located above the wrench base 14 such that the "tightening grip (at 14) is substantially located between said manometer (5) and (a) fastening base" at externally threaded extension 18 which is in turn threadedly connected to the liquefied gas tank for the purpose of providing an indication of the fluid pressure of the contents of the tank at all times and for the gauge to be located above the "grip" area of the valve so as to not interfere with installation of the valve body to the tank as recognized by lung.

Secondly, to employ specific dimensional lengths such that “the distance between said tightening grip base (at 14 in Watkins) and said third axis (the gauge axis) of said manometer (as taught by lung) is between about 27 mm and about 35 mm; the distance between said tightening grip base (14) and said second axis of said outlet connector is between about 60 mm and about 75 mm; and the distance between said base of said tightening grip base (114) and said fifth axis of said lever is between about 50 mm and about 110 mm”, would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Watkins, as modified by lung, has dimensions between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 12, in both Watkins and lung, “said pressurized fluid comprises a gas” as recited.

Regarding claim 13, in Watkins, as modified by lung, to employ a “distance between said tightening grip base (at 14 of Watkins) and the top of said body (at the top of the cam of lever 50 of) between about 80 mm and 120 mm” would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Watkins, as modified by lung, has a total valve length between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the

differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 14, in Watkins, as modified by lung, to employ a "distance between said tightening grip base (at 14 of Watkins) and said third axis (e.g. the axis of the gauge of) about 30 mm; b) (a) distance between said tightening grip base (14) and said second axis (at the axis of the outlet 54 of) about 65 mm; c) (a) distance between said tightening grip base (14) and said fifth axis (e.g. the axis about which the lever 50 pivots of) about 95 mm; and d) (a) distance between said tightening grip base (14) and said top of said body (at the top of the lever cam at 52 of) about 105 mm" would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Watkins, as modified by lung, has dimensions between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 15, in Watkins, "said first (longitudinal) axis and said second axis (at the threaded outlet connection at 54 of fig. 1) are substantially perpendicular" as recited.

Regarding claim 16, in Watkins as modified by lung, to employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the lever such that "the angle between the plane created by said first axis (the longitudinal axis) and said third axis (of the gauge), and the plane created by said first axis (the longitudinal axis) and said fourth axis (the axis about which the lever 50 is located of) between about 75° and about 105°" and "wherein said angle is about 90°"

(claim 17) would have been an obvious thing to do in the device of the combination since doing so merely rearranges parts so that the face of the pressure gauge faces in a desired direction relative to the direction of the lever. It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device of Watkins as modified by lung, so that the face of the pressure gauge faces in a desired direction relative to the lever, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 18, in Watkins, as modified by lung, to employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the outlet such that "the angle between the plane created by said first (longitudinal) axis and said third axis (of the pressure gauge); and the plane created by said first (longitudinal) axis and said second axis (at the outlet 54 of fig. 1 of) less than about 45°" and "wherein said angle is about 30°" (claim 19) would have been an obvious thing to do in the device of the combination since doing so merely rearranges parts so that the face of the pressure gauge faces in a desired direction relative to the direction of the outlet passage. It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device of Watkins as modified by lung, so that the face of the pressure gauge faces in a desired direction relative to the outlet passage, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 20, in Watkins, "said cooperation between said lever (50) and said valve means (24) comprises a movable rod (hollow rod 36) acting on said valve means (24)" as recited.

Regarding claim 21, in Watkins, "said lever (50) pivots between: a) at least one resting position (shown in figures 1 and 2) wherein said valve means (24) prevents an exiting of said fluid through said (outlet) connector (at 54 of fig. 1); and b) an active position (fig. 3) wherein said valve means (24) allows said fluid to circulate through said internal passage (8) and exit through said connector (at 54 of fig. 1)" as recited.

Regarding claim 22 in Watkins, "said valve means (24) is normally maintained in a closed position (fig. 2), when said lever is in said resting position, by a spring means (28)" as recited.

Regarding claim 23, Watkins discloses in figures 1-3 for example, an "apparatus which may be used for controlling the dispensing of a pressurized fluid, wherein: a) said apparatus comprises: 1) a body (at valve body 6) located about a first (longitudinal) axis comprising an internal passage (8) for said fluid, wherein said passage (8) extends between an inlet orifice (within the lower body extension below threads 18) and an outlet orifice (54); 2) a fastening base (the lower body extension) located about said first axis, wherein: (a) said base is threaded (at threads 18) at its external periphery; and (b) said base is substantially in coaxial connection with said inlet orifice; 3) an outlet connector (the external threaded outlet connector at 54 of figure 1) located about a second axis, wherein said outlet connector (at 54 of fig. 1) is substantially in connection with said outlet orifice and wherein said first (longitudinal) axis and said second axis (the axis of the outlet connector at 54 of fig. 1) are substantially perpendicular;... 5) a tightening grip (at 14) comprising a tightening grip base (14)... 6) a lever (50) located about a fourth axis, wherein (a) said lever (50) pivots around a fifth axis (at that axis of pin 48 supporting lever 50) which is substantially perpendicular to said first (longitudinal) axis and wherein said lever (50) also pivots between: (1) at least one resting position (shown in figures 1 and 2) wherein said valve means (24) prevents an exiting of said

fluid through said (outlet) connector (at 54 of fig. 1); and (2) an active position (fig. 3) wherein said valve means (24) allows said fluid to circulate through said internal passage (8) and exit through said connector (at 54 of fig. 1); and (b) said lever (50) cooperates with at least one valve means (at 24), located on said internal passage, so as to regulate fluid movement between said inlet orifice and said outlet orifice, wherein said cooperation between said lever (50) and said valve means (24) comprises a movable rod (hollow rod 36) acting on said valve means (24)".

Thus the patent to Watkins discloses all the claimed features with the exception of having "a manometer means located about a third axis, (comprising) a pressure take-off substantially connected to said internal passage (positioned such that) said tightening grip is substantially located between said manometer and said fastening base" and the specifically recited dimension requirements of "the distance between said tightening grip base and said third axis of said manometer is about 30 (mm); c) the distance between said tightening grip base and said second axis of said outlet connector is about 65 mm; d) the distance between said base of said tightening grip base and said fifth axis of said lever is about 95 mm; e) the distance between said tightening grip base and the top of said body is between about 80 mm and 120 mm; f) the angle between the plane created by said first axis and said third axis, and the plane created by said first axis and said fourth axis, is between about 75° and about 105°; and g) the angle between the plane created by said first axis and said third axis; and the plane created by said first axis and said second axis, is less than about 45°".

Firstly, the patent to lung discloses that it is known in the art to employ a pressure indicating gauge at 5, "located about a third axis" and fluidly communicated by a channel 56 to the valve body fluid passage in chamber 57, upstream of the control valve at 37 and thus indicating the pressure of the tank to which the valve is connected

at all times, the gauge 5 being physically located above a wrench base at numeral 1 such that the "tightening grip (at 1) is substantially located between said manometer (5) and (a) fastening base" at externally threaded extension 7 which is in turn threadedly connected to the liquefied gas tank, for the purpose of providing an indication of the fluid pressure of the contents of the tank at all times and for the gauge to be located above the "grip" area of the valve so as to not interfere with installation of the valve body to the tank.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Watkins a pressure indicating gauge, "located about a third axis" and fluidly communicated by a channel to the valve body fluid passage 8, upstream of the control valve 24 and thus indicating the pressure of the tank to which the valve is connected at all times, the gauge being physically located above the wrench base 14 such that the "tightening grip (at 14) is substantially located between said manometer (5) and (a) fastening base" at externally threaded extension 18 which is in turn threadedly connected to the liquefied gas tank for the purpose of providing an indication of the fluid pressure of the contents of the tank at all times and for the gauge to be located above the "grip" area of the valve so as to not interfere with installation of the valve body to the tank as recognized by lung.

Secondly, to employ specific dimensional lengths such that "the distance between said tightening grip base (14 of Watkins) and said third axis (gauge axis) of said manometer is about 30 (mm); c) the distance between said tightening grip base (14) and said second axis of said outlet connector (at 54 of fig. 1) is about 65 mm; d) the distance between said base of said tightening grip base (14) and said fifth axis of said lever (50) is about 95 mm; e) the distance between said tightening grip base (14) and the top of said body (at the top of the lever cam 52) is between about 80 mm and 120

mm” would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In *re Rose*, 105 USPQ 237 (CCPA 1955). Clearly, the device of Watkins, as modified by lung, has dimensions between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Lastly, to employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the lever such that “the angle between the plane created by said first axis (the longitudinal axis) and said third axis (of the gauge), and the plane created by said first axis (the longitudinal axis) and said fourth axis (the axis about which the lever 50 is located of) between about 75° and about 105°” and such that the “the angle between the plane created by said first (longitudinal) axis and said third axis (of the pressure gauge); and the plane created by said first (longitudinal) axis and said second axis (at the outlet 54 of fig. 1 of) less than about 45°” would have been an obvious thing to do in the device of the combination since doing so merely rearranges parts so that the face of the pressure gauge faces in a desired direction relative to the direction of the lever and to the direction of the outlet passage. It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device of Watkins as modified by lung, so that the face of the pressure gauge faces in a desired direction relative to the lever and relative to the outlet passage, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Claim 24 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins in view of lung as applied to claims 11-23 above, further in view of Arzerton et al.

The device of Watkins, as modified by lung, and in view of the generally recognized change in size, discloses all the claimed features with the exception of having "a protective covering surrounding at least part of said (valve)... said (valve being) substantially covered with a protective covering".

The patent to Arzerton et al. discloses that it is known in the art to employ a "protective covering (at C) surrounding at least part (as well as) substantially (covering)" the entirety of the valve and pressure gauge for the purpose of protecting the valve and gauge from abuse.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Watkins, as modified by lung and in view of a change in size, a protective covering surrounding the valve body and gauge for the purpose of protecting the valve and gauge from abuse as recognized by Arzerton et al.

Claims 11-23 are further rejected under 35 U.S.C. 103(a) as being unpatentable over Lange et al. (FR 2 828 922):

The translation of the reference to Lange et al. (FR) found in Lang et al. (U. S. Patent Publication No. 2004/00231729) is relied on for accuracy.

The patent to Lang et al. (FR) discloses, in figures 2-4 for example, an "apparatus which may be used for controlling the dispensing of a pressurized fluid, wherein: a) said apparatus comprises: 1) a body (1) located about a first (longitudinal) axis comprising an internal passage (at 3, 31, 32) for said fluid, wherein said passage extends between an inlet orifice (31) and an outlet orifice (32); 2) a fastening base (at lower threaded connector 17 and the portion of body 1 immediately above 17) located

about said first (longitudinal) axis, wherein: (a) said base is threaded at its external periphery (at 18); and (b) said base (17) is substantially in coaxial connection with said inlet orifice (31); 3) an outlet connector (19) located about a second axis, wherein said outlet connector (19) is substantially in connection with said outlet orifice (32); 4) a manometer means (pressure gauge 40) located about a third axis, wherein said manometer means (40) comprises a pressure take-off (41) substantially connected to said internal passage (3); 5) a tightening grip comprising a tightening grip base (the portion of body 1 immediately above 17), wherein said tightening grip is substantially located between said manometer (40) and said fastening base (17); and 6) a lever (2) located about a fourth axis, wherein (a) said lever (2) pivots around a fifth axis (marked "XX") which is substantially perpendicular to said first (longitudinal) axis; and (b) said lever (2) cooperates with at least one valve means (4), located on said internal passage (3), so as to regulate fluid movement between said inlet orifice (31) and said outlet orifice (32)" as recited.

Thus the document to Lang et al. (FR) discloses all the claimed features with the exception of having "the specifically recited dimension requirements of "the distance between said tightening grip base and said third axis of said manometer is between about 27 mm and about 35 mm; the distance between said tightening grip base and said second axis of said outlet connector is between about 60 mm and about 75 mm; and the distance between said base of said tightening grip base and said fifth axis of said lever is between about 50 mm and about 110 mm."

To employ specific dimensional lengths such that "the distance between said tightening grip base (at the portion of body 1 immediately above lower connector 17) and said third axis (the gauge 40 axis) of said manometer is between about 27 mm and about 35 mm; the distance between said tightening grip base and said second axis of

said outlet connector (19) is between about 60 mm and about 75 mm; and the distance between said base of said tightening grip base and said fifth axis of said lever is between about 50 mm and about 110 mm”, would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Lang et al. (FR) has dimensions between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 12, in Lang et al. (FR), “said pressurized fluid comprises a gas” as recited.

Regarding claim 13, in Lang et al. (FR), to employ a “distance between said tightening grip base (at the portion of body 1 immediately above lower connector 17) and the top of said body (at the top of the cam of lever 2 of) between about 80 mm and 120 mm” would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Lang et al. (FR) has a total valve length between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 14, in Lang et al. (FR), to employ a “distance between said tightening grip base (at the portion of body 1 immediately above lower connector 17) and said third axis (e.g. the axis of the gauge 40 of) about 30 mm; b) (a) distance

between said tightening grip base and said second axis (at the axis of the outlet connector 19) about 65 mm; c) (a) distance between said tightening grip base and said fifth axis (e.g. the axis about which the lever 2 pivots of) about 95 mm; and d) (a) distance between said tightening grip base and said top of said body (at the top of the lever 2) about 105 mm" would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly, the device of Lang et al. (FR) has dimensions between the specific elements recited. To employ a specific dimension, here length in millimeters, is not considered to be patentably distinguishing structure since the differences merely reflect a change in the specific length dimension between the recited elements producing a specific desired size of valve.

Regarding claim 15, in Lang et al. (FR), "said first (longitudinal) axis and said second axis (at the threaded outlet connection 19) are substantially perpendicular" as recited.

Regarding claim 16, in Lang et al. (FR), to employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the lever such that "the angle between the plane created by said first axis (the longitudinal axis) and said third axis (of the gauge 40), and the plane created by said first axis (the longitudinal axis) and said fourth axis (the axis about which the lever 2 is located of) between about 75° and about 105°" and "wherein said angle is about 90°" (claim 17) would have been an obvious thing to do in Lang et al. (FR) since doing so merely rearranges parts so that the face of the pressure gauge faces in a desired direction relative to the direction of the lever. It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device Lang et al. (FR), so that the face of the pressure gauge 40

faces in a desired direction relative to the lever, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 18, in Lang et al. (FR), to employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the outlet such that "the angle between the plane created by said first (longitudinal) axis and said third axis (of the pressure gauge 40); and the plane created by said first (longitudinal) axis and said second axis (at the outlet 19 of) less than about 45°" and "wherein said angle is about 30°" (claim 19) would have been an obvious thing to do in Lang et al. (FR) since doing so merely rearranges parts so that the face of the pressure gauge faces in a desired direction relative to the direction of the outlet passage. It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device of Lang et al. (FR) so that the face of the pressure gauge 40 faces in a desired direction relative to the outlet passage, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 20, in Lang et al. (FR), "said cooperation between said lever (2) and said valve means (4) comprises a movable rod (rod 5) acting on said valve means (4)" as recited.

Regarding claim 21, in Lang et al. (FR), "said lever (2) pivots between: a) at least one resting position wherein said valve means (4) prevents an exiting of said fluid through said (outlet) connector (19, at outlet 32); and b) an active position wherein said valve means (4) allows said fluid to circulate through said internal passage (3) and exit through said connector (19)" as recited.

Regarding claim 22 in Watkins, "said valve means (24) is normally maintained in a closed position (fig. 2), when said lever is in said resting position, by a spring means (28)" as recited.

Regarding claim 23, Lang et al. (FR) discloses an "apparatus which may be used for controlling the dispensing of a pressurized fluid, wherein: a) said apparatus comprises: 1) a body (1) located about a first (longitudinal) axis comprising an internal passage (3) for said fluid, wherein said passage (3) extends between an inlet orifice (31) and an outlet orifice (32); 2) a fastening base (17) located about said first (longitudinal) axis, wherein: (a) said base (17) is threaded at its external periphery (at 18); and (b) said base (17) is substantially in coaxial connection with said inlet orifice (31); 3) an outlet connector (19) located about a second axis, wherein said outlet connector (19) is substantially in connection with said outlet orifice (32) and wherein said first (longitudinal) axis and said second axis (the outlet connector 19 axis) are substantially perpendicular; 4) a manometer means (pressure gauge 40) located about a third axis, wherein said manometer means (40) comprises a pressure take-off (41) substantially connected to said internal passage (3); 5) a tightening grip comprising a tightening grip base (the portion of body 1 immediately above 17), wherein said tightening grip is substantially located between said manometer (40) and said fastening base (17); and 6) a lever (2) located about a fourth axis, wherein (a) said lever (2) pivots around a fifth axis (at "XX") which is substantially perpendicular to said first (longitudinal) axis and wherein said lever (2) also pivots between: (1) at least one resting position wherein said valve means (4) prevents an exiting of said fluid through said connector; and (2) an active position wherein said valve means (4) allows said fluid to circulate through said internal passage (3) and exit through said connector (19); and (b) said lever (2) cooperates with at least one valve means (4), located on said internal

passage (3), so as to regulate fluid movement between said inlet orifice (31) and said outlet orifice (32), wherein said cooperation between said lever (2) and said valve means (4) comprises a movable rod (5) acting on said valve means (4)" as recited.

To employ a specific angle between planes at the longitudinal axis of the valve and the axis of the manometer and the axis of the lever such that "the angle between the plane created by said first axis (the longitudinal axis) and said third axis (of the gauge), and the plane created by said first axis (the longitudinal axis) and said fourth axis (the axis about which the lever 2 is located of) between about 75° and about 105°" and such that the "the angle between the plane created by said first (longitudinal) axis and said third axis (of the pressure gauge 40); and the plane created by said first (longitudinal) axis and said second axis (at the outlet connector 19 of) less than about 45°" would have been an obvious thing to do in the device of Lang et al. (FR) since doing so merely rearranges parts so that the face of the pressure gauge 40 faces in a desired direction relative to the direction of the lever 2 and to the direction of the outlet passage 32. It would have been obvious to one having ordinary skill in the art at the time the invention was made to physically relocate the various parts of the device of Lang et al. (FR) so that the face of the pressure gauge 40 faces in a desired direction relative to the lever 2 and relative to the outlet passage 32, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Claim 24 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al. (FR) as applied to claims 11-23 above, further in view of Arzerton et al.

The device of Lang et al. (FR) in view of the generally recognized change in size, discloses all the claimed features with the exception of having "a protective covering

surrounding at least part of said (valve)... said (valve being) substantially covered with a protective covering".

The patent to Arzerton et al. discloses that it is known in the art to employ a "protective covering (at C) surrounding at least part (as well as) substantially (covering)" the entirety of the valve and pressure gauge for the purpose of protecting the valve and gauge from abuse.


It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Lang et al. (FR), as modified, a protective covering surrounding the valve body and gauge for the purpose of protecting the valve and gauge from abuse as recognized by Arzerton et al.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on (571) 272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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John Rivell
Primary Examiner
Art Unit 3753

j.r.